

The opinion in support of the decision being entered today is *not* binding
precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DEREK P. FOOTER, CARLOS GONZALES, ANGELA M.
TRUJILLO, and NARDA J. LAVERDE

Appeal 2006-3117
Application 09/732,498
Technology Center 2600

Decided: October 4, 2007

Before ROBERT E. NAPPI, JEAN R. HOMERE, and
JOHN A. JEFFERY, *Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Examiner's Final
Rejection of claims 1 through 17. We have jurisdiction under 35 U.S.C.
§ 6(b) to decide this appeal. We reverse.

The Invention

Appellants invented a method and system for collecting and recording navigation and transaction data relating to customer's use of interactive television. (Specification 1).

An understanding of the invention can be derived from exemplary independent claims 1 and 14, which read as follows:

1. A system for obtaining data regarding customer use of interactive television, comprising:

at least one application server including at least one application program where the at least one application program is transmitted to users via at least one broadcast center;

a communications satellite, where the communications satellite receives transmissions from the at least one broadcast center;

a plurality of satellite dishes that receive the at least one application programs via the communications satellite, where each satellite dish transmits signals to a integrated receiver/decoder (IRD), where the IRD may transmit signals via a modem;

at least one graphic user interface (GUI) provided for each IRD, where the at least one GUI enables users to interact with and input data to the at least one application program, where the IRD includes callback functionality and flash memory;

a data log of user transactions and navigation activity, said data residing in the flash memory;

at least one communications server for receiving any callback functionality including data;

at least one interactive server where the at least one interactive server receives signals from the at least one communication server, wherein the at least one interactive server encapsulates the data into an appropriate protocol

for transmission and each interactive server including a 333 MHz CPU or greater and 256 MB RAM or greater;

at least one interactive data repository (IDR) for storing data; and

a router in each interactive server, where each router includes a router application, said router application written in Unix C or Open TV.

14. A method for obtaining data regarding a customer use of interactive television, comprising the steps of:

providing at least one application programs on application servers;

transmitting the at least one the application program to a broadcast center;

transmitting the at least one application program from the broadcast center to a communications satellite;

transmitting the application program from the communications satellite to a plurality of satellite dishes;

communicating the at least one application program from each satellite dish to at least one integrated receiver/decoders ("IRD");

enabling a user to input data into the at least one application program received by the IRD via a graphical user interface (GUI);

inputting data into a data log in flash memory in each IRD;

transmitting the data log via callback from each IRD to a communications server;

transmitting the data log from the communications server to an interactive server;

parsing user navigation and transaction data where the transactions include gaming activity, weather requests, advertising viewed and banking transactions from the data log; and

storing user navigation and transaction data in at least one interactive data repositories ("IDRs").

In rejecting the claims on appeal, the Examiner relies upon the following prior art:

Brown	US 5,857,190	Jan. 05, 1999
Gessel	US 5,889,954	Mar. 30, 1999
Hendricks	US 6,052,554	Apr. 18, 2000
Travaille	US 6,067,107	May 23, 2000
Leermakers	US 2003/0105845 A1	Jun. 05, 2003 (filed Oct. 29, 1999)
Diwan	US 6,801,936 B1	Oct. 05, 2004 (filed Apr. 7, 2000)

The Examiner rejects the claims on appeal as follows:

- A. Claims 1 through 11 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Brown, Travaille, Leermakers and Gessel.
- B. Claims 14 through 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Brown, Travaille, Leermakers and Diwan.
- C. Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Brown, Travaille, Leermakers, Gessel, and Hendricks.

First, Appellants contend that the combination of Brown, Travaille, Leermakers and Gessel does not render claims 1 through 11 and 13 unpatentable. Particularly, Appellants contend that Leermakers¹ and Gessel²

¹ At page 10 of the Amended Appeal Brief, Appellants argue that the primary purpose of Leemakers relates to downloading softwares onto a PDA or the like. Particularly, Leermakers relates to transmitting software

are non-analogous art and there is insufficient motivation to combine them with Brown and Travaille. (Br.10-12, Reply Br. 2-3.) Appellants reiterate these same arguments against the rejection of claim 12 as being unpatentable over the references cited above in further combination with Hendricks. (Br. 15, Reply Br. 4.) In response, the Examiner contends that the Final Rejection provided sufficient statements of motivation to combine the cited references, and that Leermakers and Gessell complement Brown and Travaille to yield the claimed invention. (Answer 4-11.)

Second, Appellants contend that the combination of Brown, Travaille, Leermakers and Diwan does not render claims 14 through 17 unpatentable. Particularly, Appellants contend that Leermakers and Diwan³ are non-analogous art and there is insufficient motivation to combine them with Brown and Travaille. (Br. 12-14, Reply Br. 3-4.) In response, the Examiner contends that the Final Rejection provided sufficient statements of motivation to combine the cited references, and that Leermakers and Diwan complement Brown and Travaille to yield the claimed invention. (Answer 11-12.)

applications via a Java implemented device. However, Leermakers is not particularly concerned with data log transactions or navigational activity pertaining to the user.

² At page 11 of the Amended Brief, Appellants argue that Gessel relates to a telecommunication network, and fails to teach any type of broadcast system that obtains data regarding customer use nor does it teach downloading software on any type of device.

³ At page 13 of the Amended Brief, Appellants argue that Diwan relates to an information distribution system that provides information to multiple subscribers. However, it fails to teach any type of broadcast system that obtains data regarding customer use nor does it teach downloading software on any type of device.

ISSUE

The *pivotal* issue in the appeal before us is as follows:

Have Appellants shown⁴ that the Examiner failed to establish that the combined disclosures of Brown, Travaille, Leermakers and Gessel/Diwan render the claimed invention unpatentable under 35 U.S.C. § 103(a)? Particularly, would one of ordinary skill have found a sufficient rationale to combine Brown, Travaille, Leermakers and Gessel/Diwan to yield the claimed invention?

FINDINGS OF FACT

The following findings of fact are supported by a preponderance of the evidence.

The Invention

1. Appellants invented a method and system (Figure 1) for collecting and recording in an interactive data repository navigation and transaction data pertaining to a customer's use of an interactive television. (Specification 6.)

⁴ In the examination of a patent application, the Examiner bears the initial burden of showing a *prima facie* case of unpatentability. *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). When that burden is met, the burden then shifts to the applicant to rebut. *Id.*; see also *In re Harris*, 409 F.3d 1339, 1343-44, 74 USPQ2d 1951, 1954-55 (Fed. Cir. 2005) (finding rebuttal evidence unpersuasive). If the applicant produces rebuttal evidence of adequate weight, the *prima facie* case of unpatentability is dissipated. *Piasecki*, 745 F.2d at 1472, 223 USPQ at 788. Thereafter, patentability is determined in view of the entire record. *Id.* However, Appellant has the burden on appeal to the Board to demonstrate error in the Examiner's position. See *In re Kahn*, 441 F.3d 977, 985-86, 78 USPQ2d 1329, 1335 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1455 (Fed. Cir. 1998)).

2. As depicted in Figure 1, the interactive television includes an application server (110) that transmits an application program (120) to an integrated receiver decoder (IRD) (160) via a satellite link formed by a broadcast center (130), a communication satellite (140) and a satellite dish (150) (*Id.*)
3. The IRD includes a flash memory (190), which stores a data log (180) of users' navigation and transaction activities. The IRD is coupled to a GUI (170) that permits users to transmit callback functionality including the received application program data to a communication server (210) via a modem. (*Id.* 7.)
4. The communication server (210) forwards the callback data to an interactive server (220), including a CPU of at least 333 MHz and at least 256 MB RAM. The interactive server (220) encapsulates the data into an appropriate protocol before forwarding it to an interactive data repository (240) via a router application (230) written in UNIX C or Open TV. (*Id.* 8-9.)

The Prior Art Relied Upon

5. As depicted in Figure 1, Brown teaches a system for logging data in an interactive television system (20) having a centralized computer center (22) with a server system (24), an event log manager (56) and a log database (62) (Col. 3, l. 65- col. 4, l. 11.)
6. In Brown, the centralized computer system/headend (22) communicates via a network (28) with a user interface unit (26) to enable users to download or store applications received from the headend (22) in the event buffer (34) and the memory (36). (Col. 4, ll. 46-65.)

7. Brown teaches that the headend (22) can interact with the user interface unit (26) via satellite communication. Brown also teaches that the communication network can be constructed using a combination of wireless and wire-based technologies. (Col. 4, ll. 41-45.)
8. Travaille teaches an interactive broadcast system (100) including a broadcast server (110) that maintains a database of interactive applications (112) that are transmitted to a broadcast receiver (120) (col. 4, ll. 21-36.)
9. Travaille further teaches that the broadcast receiver (120) includes storage devices (212, 214) that can be substituted with a flash memory to permit them to retain their content after a power loss. (Col. 7, ll. 1-10.)
10. Leermakers teaches a network control center (30) having a server system (33) to broadcast therein via satellite link (40) software applications contained to a plurality of portable clients (50). Each portable client (50) includes a modem (93) for providing two-way communication with the server system. (Paragraph [0027].)
11. Gessel teaches a network manager for controlling and configuring a simulated telecommunications network having a plurality of nodes, each node having a telecommunications protocol encapsulated by the TCP/IP protocol. The network manager utilizes a UNIX- based Internet socket interface to provide communications between applications of different processors. (Col. 4, ll. 30-45.)
12. Diwan teaches a distributed network (175) for allowing subscribers (105-125) to request certain types of information (e.g. weather, stock quotes) from information providers (145-175). The information providers gather the requested information from various sources, and package them into

customized bundles according to stored rules for delivery to customers.
(Abstract.)

PRINCIPLES OF LAW

1. OBVIOUSNESS (Prima Facie)

The Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966), stated that the following factual inquiries underpin any determination of obviousness:

Under § 103, [1] the scope and content of the prior art are to be determined; [2] differences between the prior art and the claims at issue are to be ascertained; and [3] the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such (4) secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.

Where the claimed subject matter involves more than the simple substitution one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement, a holding of obviousness must be based on “an apparent reason to combine the known elements in the fashion claimed.” *KSR Int’l v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740-41, 82 USPQ2d 1385, 1396 (2007). That is, “there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.*, 127 S. Ct. at 1741, 82 USPQ2d at 1396 (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)). Such reasoning can be based on interrelated teachings of

multiple patents, the effects of demands known to the design community or present in the marketplace, and the background knowledge possessed by a person having ordinary skill in the art. *KSR*, 127 S. Ct. at 1740-41, 82 USPQ2d at 1396.

ANALYSIS

35 U.S.C. § 103(a) REJECTION

As set forth above, independent claim 1 requires an IRD that includes a flash memory having transaction and navigation activity data residing thereon, and that the IRD may transmit signals via a modem. The claim further requires an application server for transmitting an application program to the IRD, a communication server for receiving the transaction and navigation data, and an interactive server that encapsulates received data into an appropriate protocol for transmission. We find that Brown, Travaille, Leermakers and Gessel are not properly combined to teach those limitations. Particularly, we find insufficient support in the record before us for the Examiner's conclusion of obviousness. The Supreme Court has held that in analyzing the obviousness of combining elements, a court need not find specific teachings, but rather may consider "the background knowledge possessed by a person having ordinary skill in the art" and "the inferences and creative steps that a person of ordinary skill in the art would employ." *See KSR Int'l v. Teleflex Inc.*, 127 S. Ct. at 1740-41, 82 USPQ2d at 1396 (2007). To be nonobvious, an improvement must be "more than the predictable use of prior art elements according to their established functions." *Id.* However, the basis for an obviousness rejection cannot be merely conclusory statements; there must be some "articulated reasoning

with some rational underpinning to support the legal conclusion of obviousness.” *Id.*

As detailed in the Findings of Fact section above, we have found that Brown teaches a memory in the user interface to store received data. (Finding 6). Further, we have found that Travaille teaches that the use of a flash memory in a broadcast receiver provides the benefit of preserving the stored content in memory in the event of a power failure. (Finding 9.) We agree with the Examiner that one of ordinary skill would have found it useful to integrate Travaille’s teachings into Brown’s by substituting the flash memory for the regular memory in Brown for the purpose of preserving data upon a loss of power.

Further, we have found that Brown teaches that a combination of satellite communication and wired communication can be used to transmit data between the user interface and the headend. (Finding 7.) We have also found that Leermakers teaches the use of a modem in a portable client to permit two way communication between the client and the server system in a satellite communication environment. (Finding 10.) Therefore, the ordinarily skilled artisan would have found it beneficial to integrate Leermakers’ modem into Brown’s IRD to enable two way communication between the headend and the IRD, as specifically suggested by Brown and Leersmakers. We find in record before us, however, no apparent reason to support the proposed incorporation of Leermaker’s communication server into Brown’s system. Neither Brown, Travaille nor Leermarker appears to suggest the need for using separate servers in a single system, wherein one server transfers application programs and the other server receives transaction and navigation data. It is our view that the ordinarily skilled

artisan would not have readily recognized the need to combine Leermakers with Brown and Travaille to yield the separate servers, as recited in independent claim 1.

Additionally, we have found that Gessel teaches encapsulating nodes in a telecommunication system using TCP/IP for transmission in a LAN that uses internet socket interface of a UNIX type to permit communication between processors of different formats. (Finding 11.) However, we fail to find a sufficient rationale to integrate Gessel's teaching of encapsulating data into Brown's server. We do not agree with the Examiner that such integration would allow processors using different formats to communicate since we find no indication in Brown that processors of different formats are being used. It is therefore our view that one of ordinary skill in the art would have not had the need to integrate TCP/IP in Brown to encapsulate data before transferring them.

It follows that the Examiner erred in rejecting independent claim 1 as being unpatentable over the combination of Brown, Travaille, Leermakers and Gessel. We find for these same reasons that dependent claims 2 through 11 and 13 are not unpatentable over the cited combination. We reverse this rejection.

Similarly, we reverse the rejection of dependent claim 12 as being unpatentable over the combination of Brown, Travaille, Leermakers, Gessel, and Hendricks.

We now turn to the rejection of claims 14 through 17 as being unpatentable over the combination of Brown, Travaille, Leermakers and Diwan. We note that, as in the rejection of claim 1, the Examiner relies upon Leermakers for its teaching of a communication server to receive

transaction and navigation data. (Final Rejection 12.) As discussed in the preceding paragraph, we find no sufficient rationale in the record before that would have led the ordinarily skilled artisan to combine such teaching of Leermakers with Brown's system to yield the separate servers as required by claim 14. Therefore, the suggested combination is improper. Consequently, we find that the Examiner erred in rejecting claims 14 through 17 as being unpatentable over the cited combination. We reverse this rejection.

CONCLUSION OF LAW

On the record before us, the Examiner has failed to establish that Brown, Travaille, Leermakers and/or Gessel, Diwan and Hendricks are properly combined to render claims 1 through 17 unpatentable under 35 U.S.C. § 103(a).

Appeal 2006-3117
Application 09/732,498

DECISION

We have reversed the Examiner's decision rejecting claims 1 through 17.

REVERSED

rwk

THE DIRECTV GROUP, INC.
PATENT DOCKET ADMINISTRATION
CA / LA1 / A109
P O BOX 956
EL SEGUNDO CA 90245-0956